## REMARKS

The specification has been amended to correct the identification of Japanese Published Patent Application No. Hei 10-162446. A copy of Japanese Hei 10-162446 is submitted herewith (see Information Disclosure Statement below) so that the Examiner can confirm that the correct identification is Hei 10-162446.

It is respectfully requested that the amendments to the specification be approved and entered.

Attached are marked up copies of the original specification pages showing the corrections in handwriting thereon.

## INFORMATION DISCLOSURE STATEMENTS

Submitted herewith are copies of the publications identified on the attached form PTO/SB/08A. It is respectfully requested that the Examiner return an initialed form PTO/SB/08A to confirm that the publications listed therein have been considered and made of record.

Japanese Hei 10-162446 is discussed on pages 1-3 of the present specification. A commercially available English language Abstract thereof is submitted herewith.

USP 5,959,946, issued on September 28, 1999, corresponds to Japanese Hei 10-162446. It is noted that Japanese Hei 10-162446 claims the priority of U.S. Application Serial No. 672511 filed June 26, 1996, which is the parent application from which USP 5,959,946 matured.

Japanese Hei 10-171697 is discussed on pages 1-3 of the present specification, and a commercially available English language Abstract thereof is submitted herewith.

Japanese Hei 10-161750 is discussed on pages 1-3 of the present specification and a commercially available English language Abstract thereof is submitted herewith.

In view of the discussions in the present specification, and the submission of English language materials for each of the Japanese publications submitted herewith, it is respectfully requested that the Examiner consider all of the publications submitted herewith and make them of record.

Respectfully submitted,

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# DATA MANAGEMENT SYSTEMS

## BACKGROUND OF THE INVENTION

### Field of the Invention

The present invention relates to data management apparatus, data management methods, data readers, information management systems and data reading methods.

### Prior Art

There have been proposed techniques that provide a plurality of storage sections in a single storage medium and store various kinds of data in the respective storage sections, for example, as disclosed in Unexamined Published Japanese Patent Applications Hei 10-142446, 10-171697, and 11-161750.

The Application Hei 10-142446 a technique that uses a hybrid optical recording medium, which includes a first optical area for recording information in advance according to a standard format of high-level configuration, and a second optical area where additional information is written, called back, deleted or changed by a computer connected to the disk drive unit. Thus, original information can be previously stored in the first optical area in a mass production process and additional information to be written on the disk can be added to the second optical area.

The Application Hei 10-171697 discloses a hybrid card having an optical recording area for recording data and management information, and an IC chip capable of rewriting information. An information recording/reproducing device is used to record data and its management information on the optical recording area of the card and also record on the

IC chip address information of predetermined items of all management information recorded in the optical recording area. Therefore, before accessing the optical recording area, address information is read from the IC chip, and management information at the related address is reproduced from the optical recording area.

The Application Applications Hei discloses a storage medium in the form of a DC-ROM, which includes an antenna coil and an integrated circuit connected to the antenna coil. The storage medium proper has game software already stored, whereas the integrated circuit has a built-in nonvolatile memory. The progress of the game played based on the game software is stored in the integrated circuit.

With recent diffusion of PCs (Personal Computers) and the Internet, the user frequently stores in PC various kinds of information to be maintained or very often downloads contents from various servers and stores them in PC. Generally, information to be stored and downloaded contents are stored and managed in the hard disks in the PCs. However, as information and contents to be stored become diversified, the percentage of the hard disk occupied by them increases immensely, thus hampering the other work that will be carried out on the PC.

Possible solutions of this problem are to utilize the above-mentioned Applications to store various kinds of information which should be retained, and the downloaded contents in external storage media to thereby manage them. With the Application Hei 10-142446, the first optical area has stored original information beforehand in a mass production process, and furthermore the second optical area stores additional information, which is to be written to the disk. Because the original information is stored in the optical area in advance in the mass production process, this technique is

inappropriate for storing information to be stored personally and any downloaded data.

In the Application Hei 10-171697, data and its management information are recorded in the optical recording area on the card, and address information of specified items of all management information recorded in the optical recording area is recorded on the IC chip. Therefore, three kinds of information must be stored in the card, which information are ① data, ② data management information, and ③ address information for the management information, which makes the storage control process complicated. As the amount of data to be stored increases, the amount of data management information and address information thereof increases, thus prolonging the storage time.

Further, in the Application Applications Hei 11-161750, game software is stored in advance in the recording medium and the changing situation in the course of the game to be played according to the software is recorded and stored in the integrated circuit element. Therefore, it is impossible for the PC user to store and manage the various items of information and the downloaded contents that he or she wishes to retain.

## SUMMARY OF THE INVENTION

The present invention has been made in view of the above problems. It is an object of the present invention to provide a data management apparatus, a data management method, a data reader, an information management system and a data reading method, which can manage information that the user needs to retain and various items of data such as downloaded contents, in a simple storage control process.

In order to achieve the above object, the present invention provides